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NASA TECH BRIEF



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Simulated Hailstone Fabrication and Use in Testing Weatherability of Structures

Equipment has been designed and placed into operation for the fabrication and use of simulated hailstones to test the weatherability (resistance to hailstone impacts) of exposed structures. The equipment includes molds for fabricating hailstones of assorted sizes, deep freeze units to store and stabilize them at 18°F, guns to project the hailstones at velocities experienced in a hailstorm, and devices for measuring their velocity just prior to impact on test panels.

In conducting tests, the surface contour of the panels is measured prior to impact by the hailstones. The panels are then exposed to impact by hailstones of prescribed size and velocity. The contour of the panels after impact is measured and related to the

original contour to obtain a measure of the effect of the hailstone impact on the panel structure.

Note:

Documentation for the innovation is available from:
Clearinghouse for Federal Scientific
and Technical Information
Springfield, Virginia 22151
Price \$3.00
Reference: TSP68-10552

Patent status:

No patent action is contemplated by NASA.

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